1IN THE UNITED STATES PATENT AND TRADEMARK OFFICE AS A
DESIGNATED OR ELECTED OFFICE
UNDER THE PATENT COOPERATION TREATY

Applicants: Thomas J. HIGGINS, Linda M. TABE and Hartmut E. SCHROEDER

For: METHOD FOR ALTERING STORAGE ORGAN COMPOSITION

Filed: 17 March 2000

Application No.   Unassigned

Attorney Docket No. 33-00

TRANSMITTAL

Asst. Commissioner for Patents
ATTN: Box PCT
Washington, DC 20231

Sir:

Applicants respectfully request amendment of the above-mentioned application as follows:

In claim 3, in the first line, please rewrite "claims" as --claim-- and delete "or 2".

In claim 4, in the first line, please rewrite "claims" as --claim-- and delete "2 or".

In claim 9, in the first line, please rewrite "claims" as --claim-- and delete "or 7".

In claim 11, in the first line, please rewrite "claims" as --claim-- and delete "to 10".

In claim 14, in the first line, please rewrite "any one of claims" as --claim-- and delete "to 13".

In claim 16, in the first line, please rewrite "claims" as --claim-- and delete "or 15".

In claim 17, in the first line, please rewrite "any one of claims" as --claim-- and delete "to 13".

In claim 19, in the first line, please rewrite "claims" as --claim-- and delete "or 18".

In claim 20, in the first line, please rewrite "any one of claims" as --claim-- and delete "to 19".

In claim 24, in the first line, please rewrite "claims" as --claim-- and delete "or 23".

In claim 27, in the first line, please rewrite "claims" as --claim-- and delete "or 26".

In claim 31, in the first line, please rewrite "claims" as --claim-- and delete "or 30".

In claim 32, in the first line, please rewrite "claims" as --claim-- and delete "or 30".

In claim 36, in the first line, please rewrite "claims" as --claim-- and delete "or 35".

In claim 37, in the first line, please rewrite "any one of claims" as --claim-- and delete "to 36".

In claim 41, in the first line, please rewrite "claims" as --claim-- and delete "or 40".

In claim 45, in the first line, please rewrite "claims" as --claim-- and delete "or 44".

In claim 50, in the first line, please rewrite "claims" as --claim-- and delete "or 49".

In claim 51, in the first line, please rewrite "claims" as --claim-- and delete "or 49".

In claim 55, in the first line, please rewrite "claims" as --claim-- and delete "or 54".

In claim 56, in the first line, please rewrite "any one of claims" as --claim-- and delete "to 55".

In claim 57, in the first line, please rewrite "any one of claims" as --claim-- and delete "to 56".

In claim 61, in the first line, please rewrite "claims" as --claim-- and delete "to 60".

In claim 62, in the first line, please rewrite "claims" as --claim-- and delete "to 60".

In claim 63, in the first line, please rewrite "claims" as --claim-- and delete "or 62".

Please amend claim 64 as follows:

64.   The method according to any one of claims 21, 28, 33, 38, 42, 47, 52 or 58 [to 63] further comprising the first steps of:
(i)   introducing the chimeric gene into a plant cell, tissue, organ or whole organism; and
(ii) regenerating an intact plant therefrom.

Please amend claim 65 as follows:

65.   A transformed plant produced by the method according to any one of claims 1, 21, 28, 33, 38, 42, 47, 52 or 58 [to 64] or progeny of said plant, wherein said progeny comprises at least one copy of the chimeric gene in an expressible format.
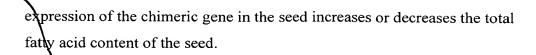
Please cancel claim 66 without prejudice.

Please amend claim 67 as follows:

67.   A plant part derived from the plant according to claim 65 [or the progeny
       according to claim 64] wherein said plant part comprises at least one copy of
       the chimeric gene present in said plant or progeny in an expressible format.

Please cancel claims 70-82 without prejudice and enter new claims 88-100 as follows:

88.   The method of claim 12, wherein the storage organ is a seed and wherein the
       total content of the seed is increased, subject to the proviso that expression of
       the chimeric gene does not only increase the sulfurous protein content of the
       seed.

89.   The method of claim 12, where in the storage organ is a seed and wherein the
       amino acid composition of the seed is modified with the proviso that
       expression of the chimeric gene does not only increase the sulfur-containing
       amino acid content of the seed.

90.   The method of claim 12, where in the storage organ is a seed and wherein
       expression of the chimeric gene in the seed increases or decreases the fibre
       content of the seed.

91.   The method of claim 12, where in the storage organ is a seed and wherein
       expression of the chimeric gene in the seed modifies the fibre composition of
       the seed.

92.   The method of claim 12, where in the storage organ is a seed and wherein
       expression of the chimeric gene in the seed decreases the total starch content
       of the seed.

93.   The method of claim 12, where in the storage organ is a seed and wherein

expression of the chimeric gene in the seed increases or decreases the total fatty acid content of the seed.

94. The method of claim 12, where in the storage organ is a seed and wherein expression of the chimeric gene in the seed modifies the fatty acid composition of the seed.

95. The method of claim 12, where in the storage organ is a seed and wherein expression of the chimeric gene in the seed decreases the anti-nutritional factor content of the seed.

96. The method according to claim 12, wherein the genetic construct further comprises a promoter sequence which confers strong expression at least in the seeds of the plant.

97. The method according to claim 96 wherein the promoter is the pea vicilin promoter.

98. The method according to claim 96 wherein the promoter is the wheat HMW glutenin promoter.

99. The method of claim 12, wherein the genetic construct further comprises a transcription terminator sequence placed downstream of the coding region of the structural gene sequence.

100. The method of claim 100, wherein the transcription terminator sequence is the pea vicilin gene terminator sequence. --

In claim 84, in the first line, please delete "66" and replace with --65--.

In claim 85, in the first line, please rewrite "any one of claims" as --claim-- and delete

"to 69".

It is believed that this submission does not require the payment of any fees. If this is incorrect, however, please charge requisite fees to Deposit Account No. 07-1969.

Respectfully submitted,

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